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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,784	03/26/2004	Thomas Bielesch	016906-0303	7135
22428 7590 09/21/2007 FOLEY AND LARDNER LLP SUITE 500			EXAMINER	
			KOCZO JR, MICHAEL	
3000 K STREET NW WASHINGTON, DC 20007		ART UNIT 3746	ART UNIT	PAPER NUMBER
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			MAIL DATE	DELIVERY MODE
			09/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/809,784	BIELESCH ET AL.				
Office Action Summary	Examiner	Art Unit				
	Michael Koczo, Jr.	3746				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 17 Au	ugust 2007.					
2a) This action is <b>FINAL</b> . 2b) ⊠ This						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) 8-14 and 16-20 is/are 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-7 and 15 is/are rejected. 7) ☐ Claim(s) is/are objected to.	withdrawn from consideration.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on 12 August 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some * c) None of:</li> <li>1.  Certified copies of the priority documents have been received.</li> <li>2.  Certified copies of the priority documents have been received in Application No</li> <li>3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
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Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 03-26-2004.	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate				

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

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### **DETAILED ACTION**

#### Election/Restrictions

Applicant's election without traverse of the group I invention in the reply filed on August 17, 2007 is acknowledged. Claims 8 to 14 and 16 to 20 therefore stand withdrawn from further consideration as being drawn to non-elected inventions.

# Specification

The abstract of the disclosure is objected to because it is too short. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

## **Drawings**

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: numeral 106.

The drawings are also objected to because the lines are rough and not uniformly drawn, and because of solid black (fig. 2).

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Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 does not recite any structure to further limit a preceding claim. It is therefore not clear what is the intended limiting effect of this claim. Furthermore, it is not clear what structure is intended to be cooled.

In claim 6, there is no antecedent basis for "the tube". It is also not clear what structure is intended to be cooled.

Claim 6 is also rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a

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gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: it is not clear where the air is discharged for cooling.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 to 5 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Bercot et al (US 5,816,781). Bercot et al disclose a duct fan having a motor 1, an impeller 2, and a distributor having a plurality of vanes 4 which connect the duct 3A and the motor.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 3 to 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coppus (US 2,271,627) in view of Troller et al (US 2,397,171). Coppus et al disclose a duct fan having a vane motor 8, an impeller 4 which is driven by the vane motor, and ducts 2 which connect the duct and the motor. The ducts 2 serve to support the motor, and to supply motive and cooling fluid to the motor. However, Coppus et al do not disclose that the ducts 2 are in the shape of vanes. Troller et al disclose a duct fan having motor support vanes 13. Having the

motor support structure in the shape of vanes reduces flow resistance and therefore improves the flow through the duct. In view of this teaching, it would have been obvious to shape the ducts 2 of Coppus in the shape of vanes. Troller et al also disclose a motor driven fan 29 to aid in supplying cooling air to the motor. It would therefore have been obvious to provide the duct fan of Coppus et al with a motor driven cooling fan.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry relating to patent applications in general should be directed to the Patent Assistance Center at 1-800-786-9199.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Koczo, Jr. whose telephone number is 571-272-4830. The examiner can normally be reached on M-Th; 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony D. Stashick can be reached at 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Koczo, Jr.

Primary Examiner

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